

Household Hazardous Waste Program



Water quality testing at Des Moines Marina *Photo D. Batura*

King County Solid Waste Division and Washington State University King County Extension Partnership

2004 is the third year of the partnership between WSU King County Extension (WSU KCE) and King County Solid Waste Division (KCSWD). Over the past three years great progress has been made towards integrating goals and objectives to create a solid partnership with concrete benefits.

As part of its Household Hazardous Waste (HHW) school and youth program efforts, the King County Solid Waste Division funds and oversees a youth training program. This program is implemented by Washington State University King County Extension (WSU KCE), and was initiated as a pilot in the fall of 2002. King County's Hazards on the

Homefront curriculum served as a perfect foundation for creating a program to provide youth with a comprehensive and hands-on learning experience. The curriculum consists of seven different lessons from which 4th – 12th grade teachers can choose. The pilot programs combined each of the lessons, two field trips and additional outreach projects to create intense six-week programs for one classroom each year. The intent of this project has been to put together a comprehensive youth-based program on Household Hazardous Waste and to pilot the program in different educational settings to determine the best audience and approach for a success.

Program Goals:

1. Educate youth in HHW principles.
2. Educate the community, through the youth community service requirement, about HHW principles.

2002 Pilot Program - Garfield High School

In the 2002 pilot attempt of coordinating and conducting the program, we greatly exceeded all the program goals and created a strong project model to be built upon. The program was conducted at Garfield High School with 120 – 9th, 10th, 11th and 12th grade students. This number was a drastic increase (380%) from original participation goal of 20 - 25 students. Out of the 120 students participating in the program, 115 completed their outreach requirement. Together they completed over 720 hours of outreach to 4th, 5th, and 6th grade classrooms in the Seattle School District.

2003 Program - Pacific Middle School

In the summer of 2003 WSU KCE piloted the second Youth-Based Household Hazardous Waste Program with at-risk youth at the Middle School level. The 2003 pilot program was full of lessons regarding the future planning of the program and the age of youth that are appropriate for the program and the team projects. While the program was less successful in facilitating community outreach amongst the participants, it was successful in teaching the basics of Household Hazardous Waste, as indicated by the pre and post-test scores.

In comparison to 2002, the 2003 pilot project was conducted with a different age group and type of student. The results varied greatly with the 2002 outcomes, but provided the program with valuable information about how to proceed in the future to ensure success.

Through the valuable information we are gathering, lessons learned, and the successes of the program and of the students involved are creating an optimistic outlook for future school and youth program efforts concerning household hazardous waste in King County.

Pacific Middle School Participants

- Eleven out of the twelve students were from economically disadvantaged households.
- All of the students had below average academic performance.
- 85% were considered to be socially disengaged and many were close to being kicked out of the school system for behavioral problems.

Test Results

Average Pre-Test Score	- 58%
Average Post-Test Score	- 83%
Average Rate of Improvement	- 43%

Inspiring Youth To Be Stewards Of The Local Environment



John Marshall Alternative School

Photo Seattle Public Schools

2004 Fall Program Plan

Based on the results of the pilot programs and the challenges faced in the summer of 2003, it was determined that the best audience for this program is high school aged youth. It is anticipated that this change will be a great help in removing the barriers to success.

With this in mind, during the fall of 2004 WSU KCE will conduct parallel programs in two different high schools in order to compare and contrast the program's effectiveness with different groups of students. The first group of students are from John Marshall Alternative School (JMAS) in the Raina neighborhood of Seattle. JMAS is a school for re-entry of students that have been expelled or have dropped out of traditional school. The student population is highly transitional and deemed to be at-risk.

The second group of student are from Ballard High School in the Ballard neighborhood of Seattle. In contrast to the students from JMAS, this group of students would be considered to be a very traditional sampling of Seattle Public School System Students. Working with both groups of student at the same time will allow us to observe a couple of key issues.

1. We will be able to compare and contrast interest level, participation, different percentages of student who complete their final outreach project vs. the number that are involved at the beginning of the program, and importantly, we can observe effectiveness of the curriculum for content and age appropriation.
2. Working with both groups of students will help us to ensure a successful outreach plan is actualized as a final project. If we were to focus solely on the at-risk, highly transitional group of students, we may be successful at having a significant impact on a certain percentage of participants, however we run the risk of sacrificing goal number two, educating the community, through the youth community service requirement, about HHW principles. Having a successful outreach project is an important component to this project for both the student participants and for the incredible impact that the students can actualize through their cumulative outreach efforts.

Overall Program Success

- The Youth-Based Household Hazardous Waste Program has directly reached 135 students in only two years
- Youth outreach has been responsible for taking HHW messages to an additional 150 - 200, 4th, 5th & 6th grad classrooms
- Student participants demonstrate significant academic improvement consistently
- The teacher participant from Garfield High School in 2002 has adopted the full curriculum as an annual component of her ecology classes

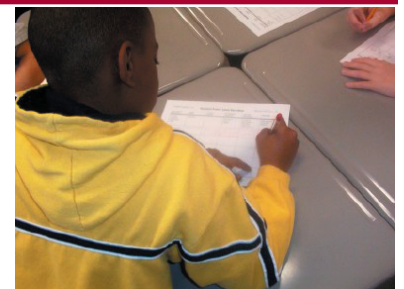


High School student teaching younger students.

Photo D. Batura



Darcy Batura
Environmental Education
919 SW Grady Way, Suite 120
Renton, WA. 98055
206/205-3130
<http://www.metrokc.gov/wsuece/>



Fourth grade student learning about HHW

Photo D. Batura